

Notice of Allowability

Application No.

10/019,639

Applicant(s)

SHIMADA ET AL.

Examiner

Doug Hutton

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's Response filed 9 June 2005.
2. ☒ The allowed claim(s) is/are 1-10 and 12.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date (see attached).
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Doug Hutton
Examiner
Art Unit: 2176

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David A. Tucker on 25 August 2005.

The application has been amended as follows:

In the Specification:

- Page 23, Line 4 → amend "then" to — than —.

In the Claims:

- amend Claim 11 to:

11. (Currently Amended) A border eliminating method, comprising:

- a step of providing common area extraction means for extracting from images of a plurality of pages of a publication an area common to the images, the common area being portions similar in layout of the images;
- a step of extracting from the images of a plurality of pages of a publication an area common to the images, the common area being portions similar in layout of the images, with the common area extraction means; and

- a step of providing border removal means for removing borders outside the common area of the images; and
- a step of removing borders outside the common area of the image from each image with the border removal means;
- wherein layouts with respect to at least either text or drawings in the common area of the images are similar to each other.

Drawings

The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

- in Figure 7C → amend “DETECITION” to — DETECTION —.

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

Election/Restrictions

Claims 1, 11 and 12 are generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn.

Allowable Subject Matter

Claims 1-12 are allowed.

The following is an examiner's statement of reasons for allowance:

Claims 1 and 11:

The closest prior art is Denber, U.S. Patent No. 5,483,606. Denber discloses a computer device for selecting a "standard common area" for eliminating the borders of a plurality of images. The method comprises scanning a first document and determining the coordinates of the corners of a "content area" of the first document. The content area is that portion of the first document within which the content is contained. The content area is set as the "standard common area" for eliminating the borders of the subsequently scanned documents. Subsequent documents are scanned and processed by aligning the documents with the content area of the first document. That is, all subsequently scanned documents are shifted in order to aligned the content of the documents within the content area of the first document.

However, the prior art fails to disclose or suggest a device for eliminating borders by selecting a common area from a standard image by performing an edge detection process that determines the document image having the largest number of edges and comprising the combination of recited elements of Claim 1.

Because Claim 1 recites a "*common area extraction means for extracting from images of a plurality of pages of a publication an area common to the images*" (see

Lines 2-4) and a “border removal means for removing borders outside the common area of the images” (see Lines 6-7), the prior art must disclose or suggest all structures and acts described in the specification that correspond to “*extracting*” from a plurality of images a “*common area*” and “*removing borders outside the common area of the images*” to invalidate Claim 1. These structures and acts include: 1) extracting a “common area,” either through the “overlapping region” process (see Figures 3 and 8; see *Specification* – Page 35, first full paragraph through Page 37, first full paragraph) or the “edge detection” process (see Figures 4 and 9; see *Specification* – Page 37, last partial paragraph through Page 41, second paragraph); 2) removing borders that are outside the common area by determining the background color of the common area (see Figures 5 and 10; see *Specification* – Page 41, last partial paragraph through Page 47, first partial paragraph) and replacing the color of that portion of the image that is outside the common area with the determined background color of the common area (see *Specification* – Page 18, first partial paragraph and Page 29, first full paragraph); and 3) all computer hardware and software necessary to perform these acts disclosed in the *Specification* and *Drawings*.

Accordingly, the subject matter recited in Claim 1 is allowable.

Claims 2-10 and 12:

These claims are dependent upon Claim 1 and are thus allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

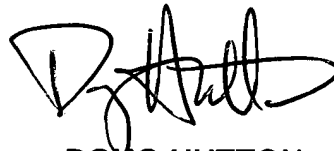
accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doug Hutton whose telephone number is (571) 272-4137. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

WDH
August 25, 2005

A handwritten signature in black ink, appearing to read "Doug Hutton", with a stylized, looped design.

**DOUG HUTTON
PATENT EXAMINER
TECH CENTER 2100**